

## Product datasheet for **TA808020M**

### Cardiac Troponin I (TNNI3) Mouse Monoclonal Antibody [Clone ID: OTI14A2]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI14A2
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Native troponin complex
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	1 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	23.8 kDa
Gene Name:	troponin I3, cardiac type
Database Link:	<a href="#">NP_000354</a> <a href="#">Entrez Gene 21954 Mouse</a> <a href="#">Entrez Gene 29248 Rat</a> <a href="#">Entrez Gene 7137 Human</a> <a href="#">P19429</a>

**Background:** Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. This gene encodes the TnI-cardiac protein and is exclusively expressed in cardiac muscle tissues. Mutations in this gene cause familial hypertrophic cardiomyopathy type 7 (CMH7) and familial restrictive cardiomyopathy (RCM). [provided by RefSeq, Jul

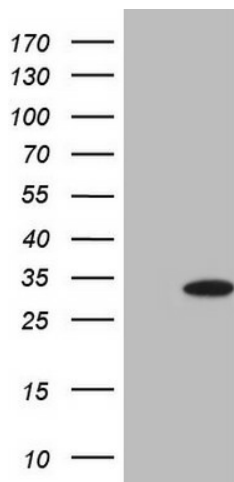

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**Synonyms:** CMD1FF; CMD2A; CMH7; cTnl; RCM1; TNNC1

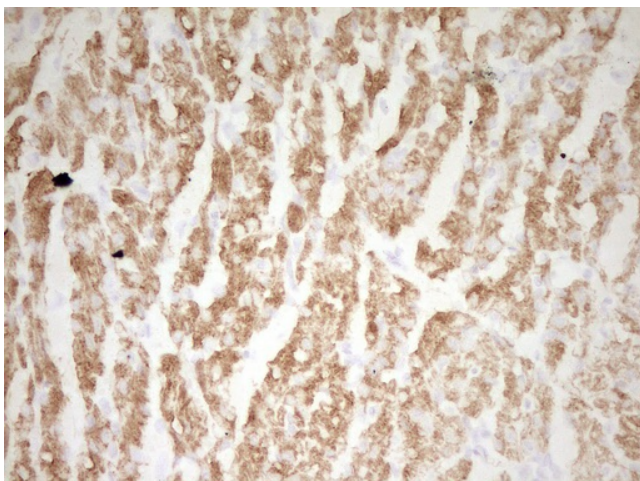
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Stem cell - Pluripotency

**Protein Pathways:** Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

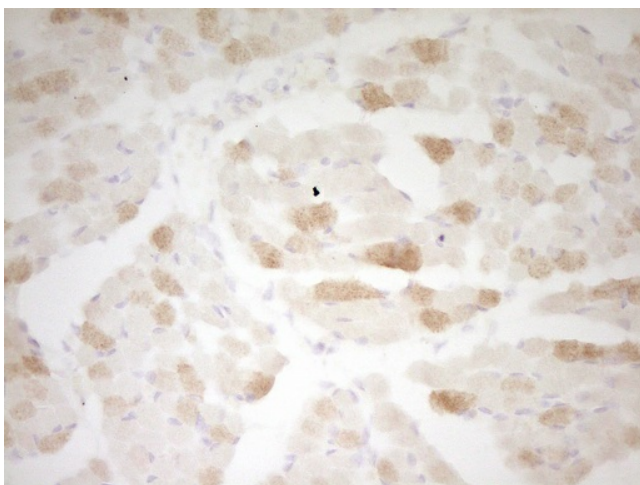
### Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY TNNI3 ([RC214740], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TNNI3. Positive lysates [LY424766] (100ug) and [LC424766] (20ug) can be purchased separately from OriGene.



Immunohistochemical staining of paraffin-embedded Human adult heart tissue using anti-TNNI3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human muscle tissue using anti-TNNI3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.